

Lesson 1

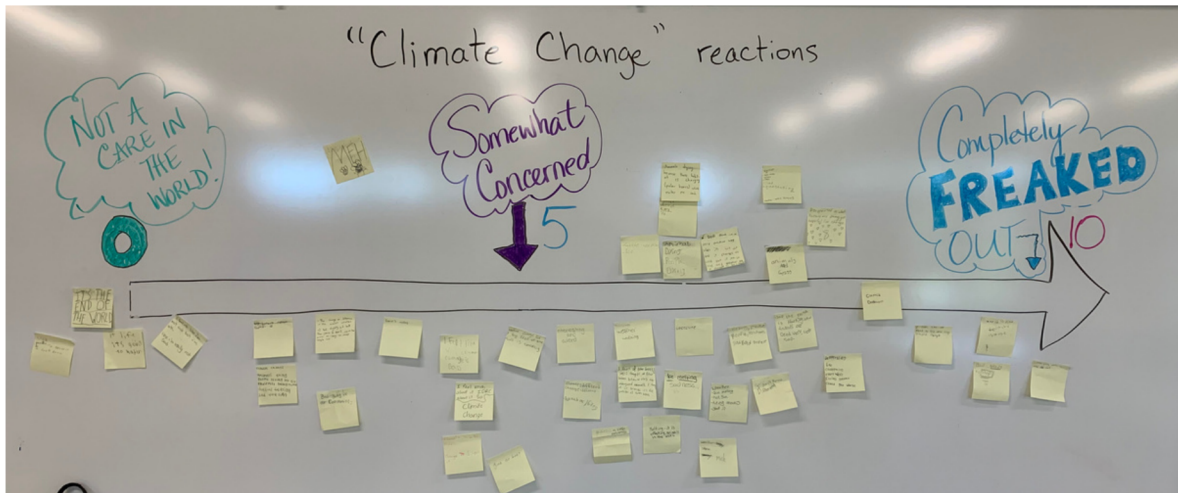
37 Minutes

Outcomes | Alberta Grade 6 Science Curriculum

- Students investigate climate, changes in climate, and the impact of climate change on Earth.
- Relate impacts of natural processes and human activities on climate change.
- Changes in climate can be caused by human activities, including industrialization and pollution.

Pre-Flight Checklist

- Device and projector set up to Climate Game Changers: <https://climategamechangers.ca/>
→ Student → Climate Change 101
- You will need a free account at <https://ourclimateourfuture.org/videos/> so be sure to set this up ahead of time.
- Sticky note and pencil for each student.
- Whiteboard and marker for each student.
- Create a spectrum on bulletin or white board like this:





- Contact First Nations elders to ask if they can join you for lesson five.
- Organize students into elbow partners; partners they can quickly turn to and share a brief conversation.

Time	Learning Opportunity
1 min	This lesson is brought to you by Canadian Parks and Wilderness Society (CPAWS), Canada's only national charity dedicated solely to the protection of public lands and waters, and to ensuring that our parks are managed in ways that prioritize conservation.

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Time	Learning Opportunity
2 min	<p>I am going to ask you how you feel about a couple of words. This will be anonymous so hide your answer if you don't want to share. You are going to write on your sticky note an emotion that arises when you hear the words. Here is an example so don't write on your sticky note yet: what emotions or feelings or even related words come to mind when I say the words "ice cream"? (happiness, summer, difficult choice, etc.). Now write emotions or feelings or even related words that come to mind when I say the words "Climate Change"? How do you feel about climate change? It could be a one word emotion or it could be your reaction, but it should involve some sort of feeling.</p>
4 min	<p>Leave your sticky note or a moment. On your whiteboard, jot down what you know/wonder about our changing climate. Share with your elbow partner. (A few might share with the whole group).</p>
4 min	<p>Look at the spectrum on the whiteboard. On the left we see "not a care in the world" or "not concerned", in the middle "somewhat concerned", on the right "completely freaked out" or "losing sleep". (Be clear about separating students' feelings from "how big a problem is climate change?"). Where are you on the concern scale in terms of the state of the climate now and in the future?</p> <p>Take your anonymous sticky and put it on the board accordingly. You can put your sticky note in between the phrases; place it anywhere on the spectrum. (You may want to take a photo of this)</p>
2 min	<p>Introduce Climate Game Changers – (students can help choose the path if you wish, if not, we will start with https://climategamechangers.ca/student/climate-change-101/ (student version, climate change 101).</p> <p>To understand how climate change may be showing up in your life, let's take some time to look at the science to find out about climate change and its impacts. This is a cool website you can explore further; we will only look at some of it.</p>

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Time	Learning Opportunity
(cont.)	<p>We are going to look at a lot of information and it is important to figure out if it is fact or opinion. At various times I will ask you if this is fact or opinion (go over ASL signs for F and O) :</p> <div style="text-align: center;">   </div> <p style="text-align: center;">F O</p> <p>Test: the sun travels across the sky from east to west (F). The sun is nasty because it can give you a sunburn (O).</p>
Optional 2 min	<p>DIGGING DEEPER Are any statements perfectly factual or absolutely opinion? Consider the statement “the sun rises in the east”. Is that a precise fact? Does it rise due east or is it a little south of east? Can we agree that we mean “the eastern part of the horizon” or must we be more precise?</p>
22 min	<p>Back to the website: we are first going to look at the “Who, What, Why?” section (click). Let’s start by clicking on the desk lamp to illuminate things a bit: “What causes it?” Turn to your elbow partner and tell them what you think causes climate change.</p> <p>(Click on What causes it? login and click “watch Full video”)</p> <ul style="list-style-type: none"> •(start intro, stop at :51 “solved big problems before, right?”). Elbow Partners – share examples of big problems we humans have solved in history. Think BIG! Share some with the whole class. •(continue with “living large”, stop at 3:55: “more more more... as large as you can”). Elbow Partners – Does this apply to Canada too? So what? We buy more, it is good for the economy, there are more jobs, we can spend more to support even more businesses. What’s the problem? Share some with the whole class. •(play on, stop at 4:40: “it’s the main reason we’re facing climate change”). Elbow partners – What do you know/wonder about fossil fuels? Jot a few ks and ws (what I know, what I wonder) on your whiteboard. Share with your elbow partner. Share some positives and negatives with the whole class. •(play on, stop at 5:40: “We’ve gotta go way back for this one”) – how was coal once alive? Explain to your elbow partner.

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Time	Learning Opportunity
(cont.)	<ul style="list-style-type: none"> •(stop at 6:43 “fast forward to the 1800’s”)
2 min	<p>Exit slip or final thoughts with elbow partner: What is the most interesting new idea for you from the past 35 minutes?</p> <p>Next time we will find out how all that stored carbon is released and what that means for us.</p>

